
A-LEVEL PSYCHOLOGY

7182/2 Psychology in context
Report on the Examination

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General

Overall, students seemed well prepared for this paper. They demonstrated considerable knowledge, especially in research methods and in the detailed responses to the biopsychology essay question. With increased experience of the specification content and past papers, it seems that teachers have gained increased insight into how the mark scheme is applied. Teachers have supported students effectively in developing good examination technique.

Questions were frequently annotated, command words identified, and key features of the question stem were highlighted. This approach did appear to be beneficial to the students. The most common error in exam technique was students not applying answers to the question stem when asked to do so. However, it is encouraging that this error was made less frequently compared to previous series.

Students appeared to manage their time effectively. There was no real evidence that they struggled to complete the paper or write full answers. However, as in previous series, there were cases of poor handwriting and cases of incorrect numbering of answers when using additional pages. Students should check they number their responses accurately when continuing onto additional pages. Centres should be proactive in enabling students to type in examinations if their handwriting is likely to be challenging for examiners to decipher accurately.

The main discriminator across the paper was the ability to demonstrate understanding. More limited answers stated knowledge and evaluative points, with application mainly paraphrasing the question stem or features of it. More able students were able to explain strengths and limitations. They used knowledge flexibly, drawing on knowledge developed across the specification and applying this to the scenario to provide effective application and elaborated evaluation.

Question 1

Most students successfully identified the correct response, demonstrating a good knowledge of the id, ego and superego. Incorrect responses were distributed relatively equally across the three distractors, although the most common incorrect response was D ('the superego mediates between the demands of the id and ego').

Question 2

This question was generally answered concisely and accurately. Most of the responses scored the available mark. Responses covered all possible content provided in the mark scheme; schema and computer models appeared to be the most common responses.

Question 3

Overall, this question was answered well, with most students achieving level 2. Responses showed evidence of good knowledge of vicarious reinforcement, with better responses applying it to the question stem to effectively explain Georgie's and Steph's daughters' attitudes to schoolwork. Effective use of terminology and in context was the main discriminator. More limited responses explained Steph's daughter's attitude better with vicarious reinforcement and imitation. However, students struggled to apply vicarious reinforcement to Georgie's daughter appropriately. Those achieving a level 1 response often muddled negative reinforcement and punishment and/or had more limited application. Some only focussed on application with no use of psychological terminology or evidence of psychological knowledge. Some students referred to Steph/Georgie as opposed to their daughters which made answers muddled/lacking clarity. A proportion of

responses provided definitions of vicarious reinforcement with no application. Additionally, some responses only applied their answers to either Steph's daughter or Georgie's daughter, limiting the number of marks which could be awarded to 2. Students must answer the full question set, utilising psychological terminology, and some need to understand the difference between effective application and just referencing details from the question stem.

Question 4

There was a good spread of marks for this question. Many answers were muddled, eg with the behaviourist approach. Students often struggled with the requirement to explain and apply the strength/limitation, revealing a lack of understanding of the strengths and limitations of SLT. Students should know that, for this type of question, they must demonstrate understanding and be able to flexibly apply their knowledge to explain novel scenarios. Therefore, they need to try to understand the strengths and limitations of the approaches and how and why these are strengths/limitations, rather than just rote learning the evaluative points.

Overall, strengths were explained better than limitations. The most common strength was linked to having research support from Bandura. Some good responses applied the results of Bandura's research to the question stem, and explained how the research evidence strengthens the theory. The most common limitation was that SLT was too simplistic, ignoring the role of genes for example. Some students effectively used mirror neurons to evidence this point. However, often limitations were of Bandura's research and not linked to the theory or the question stem.

Question 5

This question discriminated well with a good range of responses covering genetic, neurochemical, and biological structures. Effectiveness of application was often the discriminating factor. The most common responses focussed on genetic similarities between mothers and daughters for the traits described in the question stem. Better responses broadened their response to discuss potential neurochemical differences between the girls. Some responses focussed on behaviour being an adaptive response but failed to use this to explain Georgie's daughter's behaviour. Knowledge of genotype and phenotype was evident. However, for some, there was confusion about monozygotic and dizygotic twins. This was most likely due to experience of questions asked in past papers, which could not be effectively adapted to this question as the two girls were not biologically related to each other.

Question 6

This question was a good discriminator between students. Although the full range of marks was awarded, it appeared that students were unprepared for this question, with few able to achieve level 3 or 4. Whilst it appeared that students had not focussed on this topic in depth, those with a good understanding of what cognitive neuroscience was were able to use their knowledge flexibly, linking this to studies they had covered in other topic areas, and utilised their knowledge of issues and debates to discuss cognitive neuroscience effectively. For those who had a more limited understanding of cognitive neuroscience, responses often lacked focus, concentrating on ways of studying the brain, the cognitive approach, or the biological approach. Evaluation was often limited and poorly focussed. Students must explicitly link their evaluative points back to the essay title, explaining the impact of their evaluative point/evidence on the title to help keep it focussed. Remember that credit is only given for evaluating studies when these comments are discussed in the context of their possible impact on the results obtained in the study.

Question 7

This question was well answered. Most students understood the difference between endogenous pacemakers and exogenous zeitgebers, but many did not provide examples of their answer, as required by the question. The most common example of exogenous zeitgebers given was light and the SCN was commonly provided as an example of an endogenous pacemaker, but often the example was muddled or absent.

Question 8

This question was generally well answered. Most students were able to demonstrate some understanding of the fight-flight response and apply this to the stem of the question to achieve marks in level 2 or 3. The question discriminated well between students who could describe an overview of the fight-flight response, rewording the question stem to recite the symptoms as evidence of the fight-flight response, and those who genuinely understood the process and were able to provide well written and detailed descriptions with effective use of terminology and application, where the biological bases of the symptoms described were discussed.

Generally, students demonstrated good knowledge of the effects of activating the sympathetic and parasympathetic nervous system and the role of adrenaline. However, for some students, there was some muddled understanding of the role of noradrenaline and between the sympathetic and parasympathetic nervous system. The requirement for effective application, with some detail in level 3, often limited students to level 2. Copying phrases from the question stem is not effective application.

Question 9

Students appeared well-prepared for this question, and a wealth of material was produced. The full range of marks was awarded, and marks were well-distributed. It was a good differentiator between students who can recall a prepared answer (or related content) and those who have developed an understanding of the topic and can use their knowledge flexibly to demonstrate their understanding and answer the question fully and holistically. Many students struggled to relate their chosen studies to the question, or did so inappropriately, eg Phineas Gage was often provided as a good example of recovery from trauma. Better answers used studies effectively and evaluated their contributions, but only a few students were able to explain the impact of this on our understanding of plasticity and functional recovery of the brain after trauma.

There were some very impressive answers, which demonstrated a real depth and breadth of knowledge and use of research evidence. Effective application was sophisticatedly woven throughout the response. However, application appeared to be a surprisingly challenging skill, potentially fuelled by students relying on prepared material for this question and a lack of ability to use their knowledge flexibly and select studies appropriately to fit the question stem. Many provided application which merely repeated what was given in the question stem, although most students were able to link the inability to produce speech to likely damage in Broca's area. There was some lack of focus seen where responses concentrated on localisation of function without relating this to plasticity, potentially because of past paper practice on localisation of function.

The volume of detailed information recalled (including relevant studies) was very impressive. However, students should be aware that it is often not the volume of material presented but how effective it is which determines the overall mark; with application needing to be discussed appropriately to demonstrate their understanding of the topics and issues within these.

Limited responses often described plasticity as changes to the brain, and functional recovery as the brain recovering from an accident or stroke, without further detail. More able students were able to explain the processes involved in functional recovery. Many knew axonal sprouting, reformation of blood vessels and recruitment of homologous areas. The better responses knew several research studies to support their points.

Students often knew a wealth of information and research studies, but focussed on describing rather than discussing how this material supported or refuted the arguments posed and/or related to the question stem. This limited effectiveness.

Most responses described Maguire et al.'s (2006) taxi driver study with varying degrees of accuracy. Better responses were able to explain how this provided strong evidence for plasticity in adults, not just for young people, therefore disputing Xavier's comments. Likewise, the Bezzola et al. (2012) golfing study was often discussed effectively as evidence for plasticity at any age, with Schneider et al.'s (2014) cognitive reserve study discussed in relation to the number of years of education being lower the younger Xavier was, and thus the potential for disability free recovery. Occasionally phantom limb research was discussed in terms of plasticity in somatosensory cortex, and thus the counterargument to Xavier being unaffected because he was young.

Question 10

Most students selected the correct response. Although incorrect responses were seen across the three distractors, the most common incorrect response was C (null hypothesis).

Question 11

Generally, this question was answered well with most responses stating individual differences were controlled through using a repeated measures design. The factor which prevented around half of these responses achieving full marks was being able to provide appropriate application in the context of the question. Where students achieved full marks, students often gave fitness levels, subjectivity of stress ratings and differences in normal playground activities as applied examples of individual differences. Some students provided muddled responses, for example suggesting a repeated measures design would reduce order effects or there needing to be two groups.

Question 12

This question was answered well by those students who knew what the term 'counterbalancing' meant. A surprising number of students did not know the term, confused it with random allocation or only knew that counterbalancing was a way of dealing with order effects but did not know what it involved. Those who did understand the term generally described all three bullet points on the mark scheme, but some were prevented from achieving full marks due to a lack of explicit application (such as a reference to the number of students or description of the conditions).

Question 13

This question was generally well answered and was effective in differentiating between students. Some responses were limited to level 1 due to lack of appropriate context or not discussing the clear impact on validity. Level 2 responses explained how self-reporting stress levels on a scale would affect validity, often discussing subjectivity of the rating system with examples from the question stem. Many also then went on to discuss the impact of social desirability effectively and in context.

Overall, the main differentiator was being able to move beyond stating factors which could affect validity (such as demand characteristics, lying, subjectivity, etc) to explain how these would affect validity in the study, using effective examples in context to illustrate their points. There were some creditworthy responses which presented an improvement in validity.

Question 14

Generally, this question was answered well. Most students understood the difference between the two types of data and there was only occasional muddle between qualitative and quantitative data. The most common strengths and limitations identified were 'easy to analyse using statistics/graphs' and 'lack of detail'. Many applied their answers to the question stem well, although application was not always evident or appropriate. Limitations were generally applied more effectively than the strengths.

Question 15

This question was a good differentiator and proved challenging for many. Some students seem to have developed a sound understanding of what the median and range portray, and had been guided well as to how to answer this type of data interpretation question. Overall, explanations for the median were better than the range. However, students often struggled to interpret what the median suggested and then to justify their answer. The question revealed some poor understanding of what the range shows, with many students not appreciating that the range was communicating something different to the median.

It was common to see responses which just quoted data from the table as opposed to using the data to justify what the mean/median suggest about the students' stress rating after each condition. Other common mistakes were to identify that the range/median was higher/lower in one condition than the other and then give a definition of the median/range, or to consider the range as a measure of central tendency and therefore suggest that the median indicated a small difference between the conditions whereas the range suggested a large difference.

The responses given to this question highlight the importance of developing an understanding of what the measures of central tendency and dispersion show us and how they help us interpret data rather than just rote learning of definitions, how to perform calculations and simple evaluative points. Students always need to do something beyond simply restating the figures from a table and instead should expect to show an understanding of what the values mean.

Question 16

This question was another good discriminator. Many were able to demonstrate some understanding of one limitation of the range. Fewer students had sufficient understanding of what the range tells us, to be able to elaborate on this in the context of the stem with enough clarity and effective use of terminology to achieve level 2. Although there were some very good responses, it was rare to see a full marks response. The more effective responses explained that the range could be distorted by outliers and therefore may not be representative of most stress ratings. They used effective examples in context and often covered all the content on the mark scheme. However, it was common to see responses where the range was muddled with the mean/measures of central tendency and/or which provided two or three limitations rather than a full elaboration of one limitation. Another common error was a failure to apply responses effectively to stress ratings.

Question 17

This question produced a mixed response. Most students knew that being significant at the 0.01 level would mean only 1% possibility that the results were due to chance, but many did not apply their answers to the study. Some responses did not engage with the 0.01 aspect of the question and therefore could only achieve one mark for explaining the consequences of being significant, such as rejection of the null hypothesis. A common error was to suggest that being significant at the 0.01 level would mean that one could be 99.99% certain that the results were not due to chance. To avoid these errors, students should be aware of decimal places and take time to check their answers.

Question 18

This question was a good differentiator, with some excellent responses by students who clearly explained what a type II error meant in the context of the study. Some had learned the definition of a type II error but struggled to explain it clearly in the context of the study. There was only the occasional muddle with type I errors, and some who explained extraneous variables or human error. The most common error was not relating the answer to the context of the study.

Question 19

This question produced a mixed response. Those who understood what a type II error was were able to access a mark. The most common response was a suggestion to 'use the 5% level', but all three points on the mark scheme were covered by the cohort. Those who did not know what a type II error was (or did not have understanding beyond the definition) struggled to consider how the chance of making a type II error could be reduced. They often suggested replication of the study, inter-rater reliability, using an alternative test, peer review, getting others to look at the research, etc. Vague responses which suggested that the significance level should be changed were not awarded credit.

Question 20

Although a good spread of marks were awarded on this question, it was generally well answered. Most students opted for random sampling. Although there were some good stratified sampling responses seen, often this was not as well answered as those who opted for random sampling. Some confused stratified sampling for systematic sampling, and there was some confusion with random allocation seen. For some, the explanation of how the sample could be selected was limited, most often due to a lack of appropriate application.

The strength of the sampling methods was answered well. Overall outlines of the strengths of stratified sampling were better than those of random sampling.

Unfortunately, some students failed to address the whole question, only providing an outline of a strength of one of the sampling methods without explaining how a sample could be collected. Students must read an entire question carefully and address all components required.

Question 21

This question was generally not well answered. Many missed the instruction to not use self-report to measure anxiety levels, or did not understand the term self-report or that interviews were a form of self-report. However, the anxiety levels covariable was done better than time spent swimming, where a common response was to measure time swimming with a stopwatch, which was not deemed creditworthy in isolation of further detail. Very few gave a detailed enough suggestion to

gain maximum marks as they did not identify how the variable could be measured with necessary detail to be practical. Another common error was to create two groups to measure swimming time.

Question 22

This question produced a mixed response with a relatively even spread of the marks awarded. Overall students appear to have developed a good knowledge of statistics. Many could name an appropriate test of correlation and give reasons for their choices, but then found it more challenging to explain this in relation to the question stem. Thus, the requirement to link choices to the context, continued to work well as a discriminator, with only the better responses doing this.

Students were generally able to justify correlation, often with application, but found the level of data more challenging. Some students who identified interval data either did not apply this or only described one data set. There were some excellent responses, with full marks awarded for those students who had good recall of knowledge for choice of statistical test with a good understanding of exam technique for this style of question.

Question 23

This question was generally answered well and generated a range of responses. The most common creditworthy answer was to identify errors, so amendments could be made before publishing, increasing quality of published research. Limited reasons were often stated, such as 'to check for mistakes', or 'reduces bias.' Students found it more challenging to provide appropriate elaboration, although there were some strong responses seen. There were some students who suggested that peer review took place before the study occurred or that it was a way of testing reliability. A number of students simply suggested that it increased validity, with no further explanation.

Question 24

This was generally a well answered question with students demonstrating good understanding of ethical issues. The question differentiated between those who could only name ethical issues and those who could fully describe ways of dealing with them. Many students wasted a lot of time describing/justifying their issue rather than following the command word to 'identify'. Students should know the difference between giving an example of an ethical issue and providing practical ways of dealing with these.

Overall, most students were able to identify an ethical issue and give some explanation of dealing with it, although many students lost a mark for each issue by not giving enough detail. Lack of informed consent, confidentiality and deception were common responses. Some identified 'not having a right to withdraw' as an ethical issue but then struggled to explain how the issue could be dealt with beyond providing the right to withdraw (which was not creditworthy in isolation for this ethical issue). Some chose to apply the question to specific research such as Milgram, or to the study described in the question stem, but this was not always successful.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.